





# **ELECTRIC DENTAL APPARATUS**

**MADE BY**

**THE S. S. WHITE DENTAL MANUFACTURING COMPANY**



0768.P



## ANNOUNCEMENT

**S**OME years ago we decided to manufacture a full line of Electric Dental Apparatus, including Engines, Lathes, Switch Board, Air Compressor, and all necessary implements and accessories. In short, everything electric needed by the dentist.

This was really a momentous decision, full of meaning to the profession as well as to ourselves; to the profession because it meant that in time a complete line of Electric Dental Apparatus of S. S. White make would be available; to us because of the vast amount of time, study, patience and money required to provide the equipment,—human and mechanical,—to do the almost endless experimental work, and finally to manufacture the great variety of parts necessary for producing an entire line of Electric Apparatus of S. S. White standard.

There were and are Electric Dental Apparatus in abundance, some of our own manufacture, but our decision involved something higher and of greater magnitude.

While the profession may never know all that it has meant to carry our purpose into effect, it can enjoy and appreciate the result, because it will elevate Dental Electric Apparatus to a plane hitherto unknown.

Since this announcement was first published, we have been continuously making and selling Electric Engines and Lathes which have met with enthusiastic praise wherever shown. The actual sales have been highly gratifying, exceeding our anticipations.

Other apparatus not described in this catalog but in course of experiment at our Factory, will be offered later but not until exhaustive tests prove them to be representative of this company's standards, as are the Electric Engines.

**THE S. S. WHITE DENTAL MFG. CO.**

## **Outfits for Your Selection**

- S. S. White Folding-Bracket Belt Engine.
- S. S. White Folding-Bracket Cable Engine.
- S. S. White Swivel-Bracket Belt Engine.
- S. S. White Swivel-Bracket Cable Engine.

Each of the above can be supplied for 110 or 220 Volts Direct Current and 60 Cycles 110 or 220 Volts Alternating Current.

S. S. White Direct-Current Reversing Lathe.  
110 or 220 Volts.

## **“Made Entirely in Our Factory”**

We assume full responsibility for these outfits throughout,—Motors, Controllers, Brackets, Cables, Belts, Handpieces, and the tools operated by them, because they are made throughout in our factories.

Every unit is designed and properly proportioned to work with every other; each part shows the same precision of workmanship, as indicated by our trade--mark.

All parts are made “interchangeable,” and any part can be immediately duplicated.

The only outfits in the world made entirely from Bur to Motor by one concern, “backed up” by the reputation of the same manufacturer, whose good name is at stake in every part.

## **ANOTHER POINT**

Our business relations with the Dentist are continuous; our Electrical Apparatuses must be reliable else we forfeit your confidence and your patronage in the other departments of our business.

# **Features of Interest Common to all of The S. S. White Electric Dental Engines**

## **IN GENERAL**

These new Apparatus excel in all essential particulars, both the complete outfits and as well the individual units. In beauty of design, in efficiency, in their substantial character, in high-grade workmanship—the real S. S. White standard—and in many other respects, they mark a great advance.

## **INTERCHANGEABILITY**

Of parts is an important and novel feature of the S. S. White outfits. Not only does this mean economy in the renewing of parts and in changing from one type to another, but it necessarily also means a higher standard of designing and construction.

## **THE MOTORS**

Like other units of the S. S. White outfits, are made in our own factory.

### **POWER**

All of our Motors have good power through all speeds. The Direct-Current Motors, owing to our novel method of control, are exceptionally strong on the low speeds, an important advantage over other dental motors.

### **ACCESSIBILITY**

Brushes, commutators and other parts are readily accessible, particular attention having been given to this feature in designing the Motor.

### **BRUSHES AND HOLDERS**

Are especially well designed, the brushes being held firmly with just the right amount of tension, and permitting of easy renewal.

## BEARINGS

The bearings are made of phosphor bronze, most accurately fitted and provided with end adjustment, so that any wear from thrust can be taken up with the least possible trouble.

## ARMATURE

Made with more than usual accuracy and uniformity. Vibration and noise are eliminated by exact mechanical and electrical balancing. The shaft is of hardened steel, ground and polished with extreme care.

## OIL CUPS

Special under-feed oil cups of unusual capacity are provided.

## DUST PROOF

Effective means are provided for protecting the Motor against dust without interfering with the accessibility of the parts.

## THE CONTROLLER



The S. S. White Controller for Electric Dental Engines

Practically two distinct types in one, readily convertible from one type to the other without possibility of changing accidentally.

In one adjustment the Controller is of the *detent* type, the control lever remaining at any stop to which it may be moved, even after the operator's foot is withdrawn.

In the other adjustment the Controller is of the *automatic*

type, the control lever automatically returning to neutral the instant the operator's foot is removed.

The means for effecting the change is simple, durable and sure.

Among other novel features of our Controller, is the ingenious mechanism governing the swinging movements of the control lever. This, as well as other features, is worthy of careful inspection and study.

Like the Motor, the interior of the Controller is dust proof.

The Controller as a whole is characterized by compactness, sturdiness and ease of operation.

By locating the resistance apart from the Controller, we have been able to make it of a reduced size and at the same time provide more ample and durable contacts and other wearing parts.

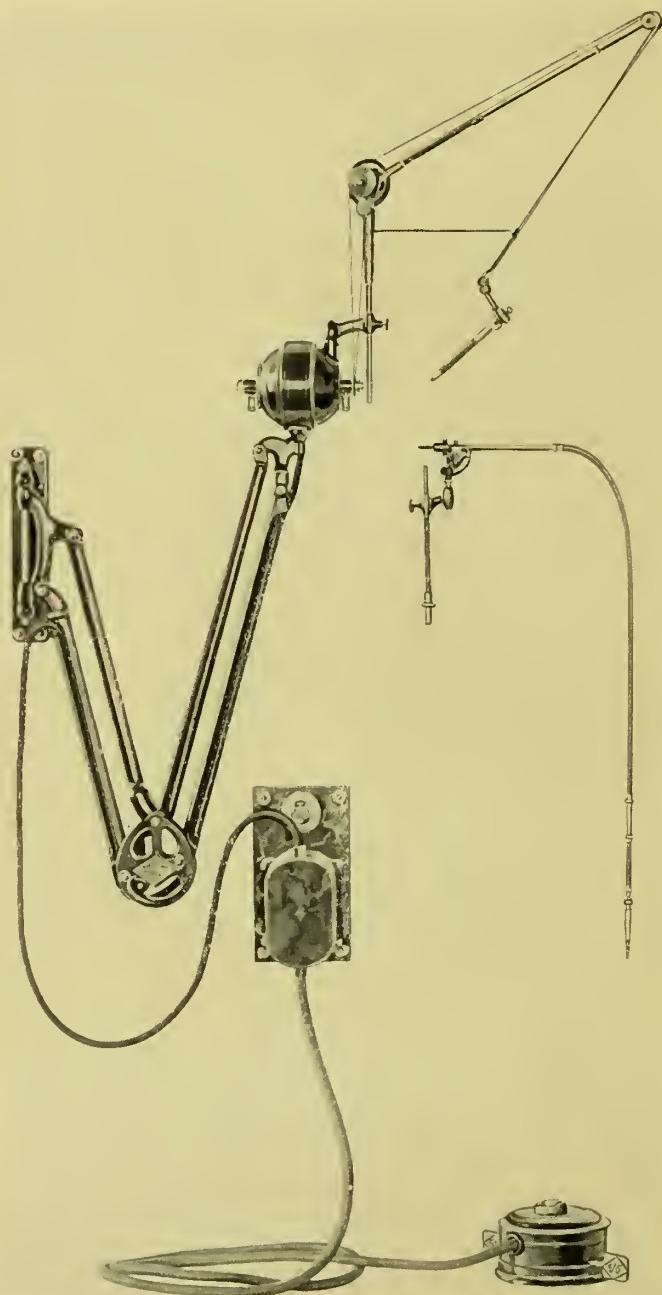
Moreover, it is readily taken apart for inspection and as readily put together again.

### THE RESISTANCE BOX

Is neat in appearance and is mounted upon a marbleized-slate base. A distinguishing feature is a substantial Revolving Double-pole Switch on the slate base and having "ON" and "OFF" indicators. The resistance elements are of the well-known fireproof enamel construction.

### "NON-SPIN" HANDPIECE

The S. S. White Electric Cable Engines are provided with an attractive improvement long needed and which will be greatly appreciated by users of this type of engine. This is an exceedingly simple, ingenious and effective device for preventing the handpiece from spinning or twirling when hanging loose while the engine is running.



The S. S. White Folding-Bracket Dental Engine

## **Special Features of the S. S. White Folding-Bracket Electric Dental Engine**

The folding type of bracket is valued because of the great range of movement afforded the motor, which is mounted upon the outer extremity of the fore arm. When not in use the bracket is closed up against the wall, thus removing the motor and engine arm entirely out of the way. In use the motor may be drawn out to an extraordinary extent, enabling it to be placed in practically any convenient position.

Our new bracket is a decided improvement over all its predecessors. By eliminating all cogs, gears and sliding parts, and introducing a simple link mechanism, all tendency to bind or chatter is entirely obviated.

Consequently the bracket may be opened and closed and the motor moved toward and away from the wall with the least possible exertion.

In general design and appearance it is far more attractive than any other bracket of the same type. Its marked simplicity, neatness and grace will commend it to all dentists having an eye for chaste beauty.

Light and airy in appearance, it is in fact exceedingly strong and firm, supporting the motor with surprising rigidity.

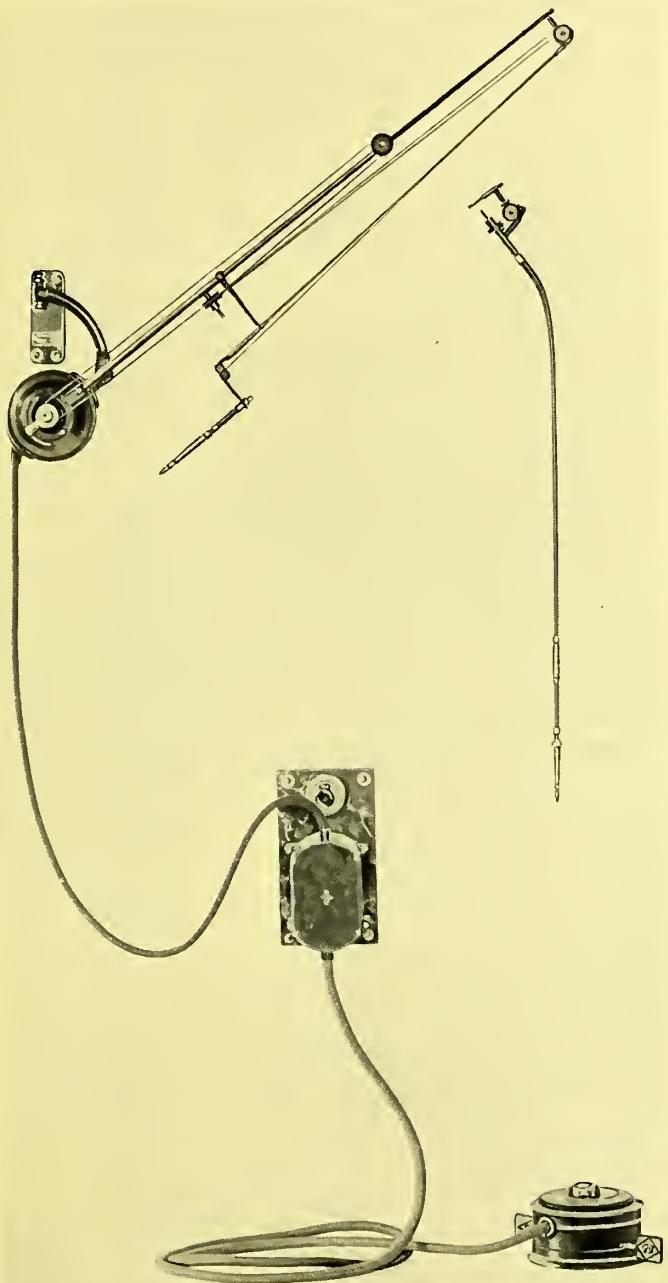
Another novel feature of great merit is the concealed conductor. Instead of looping the conductor externally to the bracket, it is passed through the hollow arms of the bracket. By this means the conductor is practically concealed from view and an unsightly feature of this type of bracket eliminated.

Regular S. S. White Foot (Cable or Belt) Engine Arms and Handpieces are used with this Bracket, a decided advantage to one who has become accustomed to a certain type of Engine Arm. Moreover, the Bracket and Electrical Equipment can be supplied ready to receive any S. S. White Engine Arm in the possession of the Dentist, thus saving him the cost of this part of the outfit.

## PRICES

### S. S. White Folding-Bracket Dental Engine

COMBINATIONS	DIRECT 110 Volts	CURRENT 220 Volts	ALTER. 110 Volts	CURRENT 220 Volts
Without Engine Arm or Handpiece . . . . .	\$123.00	\$128.00	\$133.00	\$138.00
With S. S. White Cable Arm, Reinforced Sheath, Duplex-Spring Connection, Non-Spin Swivel, and No. 7 Hand- piece . . . . .	141.00	146.00	151.00	156.00
With S. S. White Belt Engine Arm and Doriot Handpiece No. 3 . . . . .	153.00	158.00	163.00	168.00
With S. S. White Belt Engine Arm, Wrist and Slip Joint, and No. 7 Handpiece . . . . .	159.00	164.00	169.00	174.00
The No. 6 Handpiece, instead of the No. 7, adds \$1.00.				
Outfit in Plain White Enamel, adds \$6.00.				
Outfit in Decorated White Enamel, adds \$8.00.				



The S. S. White Swivel-Bracket Dental Engine

## **Special Features of the S. S. White Swivel-Bracket Electric Dental Engine**

This new engine is neater, more practicable and more efficient than others of the same type.

It is extremely simple both in construction and design, is nicely balanced, and easy of movement or adjustment.

The telescopic or extensible arm provides a wide range of movement or reach for the engine arm. During this movement the proper tension on the belt is maintained by a simple compensating device. Another simple device is provided for adjusting the tension of the belt.

The parts of the pulley head are so proportioned and jointed as to afford all necessary movement of the engine arm and with just the right limitations to prevent the belt from twisting or slipping off the pulleys.

## PRICES

### S. S. White Swivel-Bracket Dental Engine

#### COMBINATIONS

	DIRECT CURRENT 110 Volts	CURRENT 220 Volts	ALTER. CURRENT 110 Volts	ALTER. CURRENT 220 Volts
--	-----------------------------	----------------------	-----------------------------	-----------------------------

With S. S. White Cable Arm with Special Head Attachment and Reinforced Sheath, without Non-Spin Swivel, Duplex Spring or Handpiece	\$125.00	\$130.00	\$135.00	\$140.00
With "All Cord" Arm but without Handpiece .....	125.00	130.00	135.00	140.00
With S. S. White Cable Arm Complete with Special Head Attachment, Reinforced Sheath, Non-Spin Swivel, Duplex Spring and No. 7 Handpiece .....	135.00	140.00	145.00	150.00
With "All Cord" Arm Complete with Doriot Handpiece No. 3 .....	137.00	142.00	147.00	152.00
With "All Cord" Arm Complete with Wrist and Slip-Joint Connection K <sub>3</sub> and No. 7 Handpiece .....	143.00	148.00	153.00	158.00

The No. 6 Handpiece, instead of the No. 7, adds \$1.00.

Outfit in Plain White Enamel, adds \$4.00.

Outfit in Decorated White Enamel, adds \$6.00.

## **Engine Mountings for Unusual Locations**

Because of peculiar or unusual architectural conditions it is sometimes difficult, if not impossible, to install an electric dental engine with the mountings ordinarily provided and which are suitable for the large majority of usual cases.

Having made a special study of these conditions, which differ greatly in different localities and even in different buildings, we have designed and manufactured a special line of engine mountings.

For deeply recessed windows, or where wall ornamentation, piping or other obstructions interfere with the proper placing of Folding-Bracket Engines or limit their freedom of movement, we have provided a series of Extension Wall Plates.

For situations where the window frame or wall is not available, we have provided Floor and Baseboard Stands for both the Folding Bracket and the Swivel Bracket Engines. These Stands support not only the Brackets proper but also the Wall Resistance and Switch.

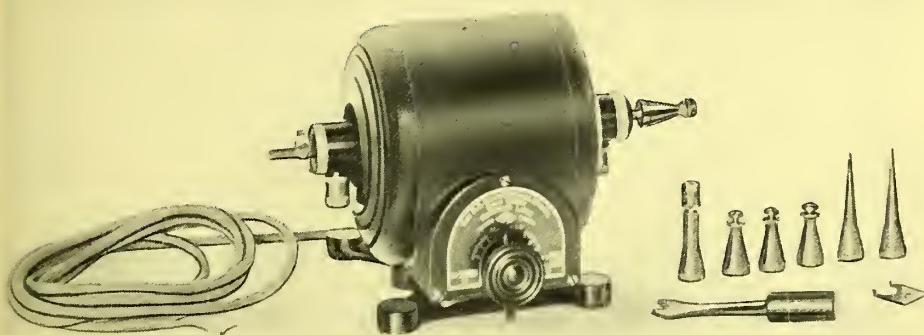
The Floor Stand is fastened to the floor at any desired point most convenient to the dentist, thus eliminating all attachment to the window frame or wall.

The Baseboard Stand is precisely the same as the Floor Stand except that it is attached to the baseboard instead of to the floor.

All of these mountings are of attractive design harmonizing well with the engines and are exactly adapted to the particular purposes for which they are intended.

Upon request we will be pleased to give further particulars concerning these special mountings.

## The S. S. White Electric Direct-Current Reversing Dental Lathe



S. S. White Direct-Current Reversing Lathe and Outfit

In every essential respect—power, control, durability, convenience, design, ease with which chucks may be attached and detached—this Lathe marks a great upward step in dental laboratory apparatus.

Each and every feature is of the most substantial character, representing the very highest grade of mechanical and electrical designing and construction.

This insures the greatest amount of comfort and satisfaction during the longest possible period of use.

The Lathe is attractive in design; sits so low and firmly upon the bench as to hold up well against the heaviest work applied to it. The shaft is brought near the bench, thus placing the work in the most advantageous and comfortable position.

The power is unusually great, especially on low speeds, and the control mechanism is particularly strong, sure, easy and durable.

An important innovation is the omission of the attached Chuck Release usually found upon Electric Dental Lathes. These at best are more or less unsatisfactory,—from a mechani-

cal standpoint mere toys,—and their use necessitates making the shaft, bearings, etc., smaller and less substantial than real efficiency warrants.

So strongly were we impressed with this fact that, after having manufactured a number of Lathes provided with what we regarded as a superior attached Chuck Release, we discarded the principle entirely and completely redesigned the shaft, bearings and related parts.

This change permitted us to make these parts on larger, stronger, more substantial lines, and of a decidedly superior type of designing; to provide better end adjustment of the bearings, ample and effective means for excluding dust and dirt, and finally to use oil cups of unusual capacity and efficiency.

The Lathe was thus improved in some of its most vital features, making it better able to stand laboratory wear and tear, and assuring greater satisfaction and longer wear in use.

In making the change we have actually provided improved means for releasing or detaching chucks, a most important item to the user of Electric Lathes. Our Chuck Release or Detacher is a separate appliance in the form of a wood-handle wrench by means of which the chuck may be forced upon or detached from the shaft with surprising ease and quickness.

The chucks accompanying the S. S. White Lathe partake of the same refinement of design and workmanship which characterizes the Lathe itself. They are made entirely in our Factory—even to the screws, which are provided with permanently attached spring-filler washers.

Last, but not least, we call attention to a pronounced novel feature of our Lathe—namely, the fact that it is capable of being reversed. The mechanism controlling this is both substantial and effective. The Lathe cannot be reversed without manipulating a stop and this stop cannot be manipulated while the Lathe is running.

## **Cable Attachment for Lathe**



In addition to the regular equipment of chucks, etc., accompanying the Lathe, we supply cables, handpieces and means for attaching the cables to the Lathe.

These include the following:

An Adapter especially designed for easily, quickly and securely attaching the cable to the Lathe.

Our regular Engine Cable and Sheath and No. 6 or No. 7 Handpiece.

Heavy Cable and Sheath and No. 1 Die-sinker's Handpiece.

Heavy Cable and Sheath and No. 2 Die-sinker's Handpiece.

## PRICES

### S. S. White Direct-Current Reversing Lathe

Without Chucks, 110-volt Direct Current .....	\$50.00
" " 220 " " .....	56.00
Chucks separately:	
A for Wheel with 3/16-in. hole .....	.60
B " " " 1/4 " " .....	.60
C " " " 5/16 " " .....	.60
D " " " 3/8 " " .....	.60
R Right-hand Taper Screw .....	1.00
L Left-hand " " .....	1.00
E Adjustable Drill Chuck .....	2.50
F Adapter Chuck, for using Unique Lathe Chucks .....	.75
G Sand Paper Arbor .....	.90
Grooved Brass Pulley for Driving Leather Belt to Air Compressor...	1.00
Cable Attachment:	
Adapter, Cable and Sheath without Handpiece .....	6.50



**THE S. S. WHITE DENTAL MANUFACTURING CO.**  
**CHESTNUT ST., COR. TWELFTH, PHILADELPHIA**

**B R A N C H E S**

**NEW YORK** : Spangler Bldg., 5, 7, and 9 Union Sq.; Charles Bldg., Madison Ave., Cor. 43d St.

**BOSTON** : Walker Bldg., 120 Boylston St.

**CHICAGO** : Atlas Bldg., Randolph St., Cor. Wabash Ave.

**BROOKLYN** : Nassau Bldg., 356 and 358 Fulton St.

**ATLANTA** : Grant Bldg., North Broad and Walton Sts.

**ROCHESTER** : Chamber of Commerce, Main St. East, Cor. South Ave.

**NEW ORLEANS** : Maison Blanche, Cor. Canal and Dauphine Sts.

**CINCINNATI** : First National Bank Bldg., Fourth and Walnut Sts.

**SAN FRANCISCO** : Butler Bldg., 135 Stockton Street

**LOS ANGELES** : Mason Bldg., Cor. Fourth and Broadway

**OAKLAND** : Oakland Bank of Savings Bldg., Cor. Twelfth and Broadway.

**TORONTO** (Can.): Confederation Life Bldg., 110 and 112 Victoria St.

**MONTRÉAL** (Can.): Birk's Bldg., 14 Phillips Sq.

**EUROPEAN BRANCH:**  
**BERLIN**, W., Mauerstrasse 83-84



